

United States Patent [19]

Mauge et al.

[11] Patent Number: 4,907,159

[45] Date of Patent: Mar. 6, 1990

[54] DEVICE FOR RECEIVING AND PROCESSING ROAD INFORMATION

[75] Inventors: Jacques F. Mauge; Serge Verron,
both of Eindhoven, Netherlands

[73] Assignee: U.S. Philips Corporation, New York,
N.Y.

[21] Appl. No.: 190,542

[22] Filed: May 5, 1988

[30] Foreign Application Priority Data

May 9, 1987 [EP] European Pat. Off. 87200845.3

[51] Int. Cl.⁴ G08G 1/09

[52] U.S. Cl. 364/436; 340/993;
364/424.01

[58] Field of Search 364/436, 424.02, 424.01,
364/424.05; 340/989, 990, 992, 993, 905

[56] References Cited

U.S. PATENT DOCUMENTS

3,845,289	10/1974	French	.....	364/436
4,092,718	5/1978	Wendt	.....	364/436
4,220,946	9/1980	Henriot	.....	364/436
4,301,506	11/1981	Turco	.....	364/436
4,350,970	9/1982	von Tomkewitsch	.....	364/436 X
4,713,661	12/1987	Boone et al.	.....	340/994
4,799,162	1/1989	Shinkawa et al.	.....	364/436

FOREIGN PATENT DOCUMENTS

2462834	2/1981	France	.
2050767	1/1981	United Kingdom	.

OTHER PUBLICATIONS

S.R. Ely and D. Kopitz, "Design Principles for

VHF/FM Radio Receivers Using the EBU Radio-Data System RDS", EBU Review -Technical, No. 20, Apr. 1984, pp. 50-58.

Primary Examiner—Parshotam S. Lall

Assistant Examiner—Thomas G. Black

Attorney, Agent, or Firm—Thomas A. Briody; Jack E. Haken; Anne E. Barschall

[57] ABSTRACT

Device for receiving and processing road information messages transmitted in digital form, each message including at least a first section for indicating the zone of the road network to which the message refers, which device includes for the control of the data processing a data processing unit which is connected to a bus for the transfer of data, to which bus are also connected a reception memory for temporarily storing the received messages, a selection unit enabling the selection from among the stored messages of those concerning a zone to be designated and a presentation unit for presenting the selected messages. The device also includes a message analysis unit which includes a zones table memory, which analysis unit is provided for recognizing the zone in question each time a message is received on the basis of the said first section of the received message and for storing in the zones table, by means of at least one indicator for each message, the received messages according to the zone to which they belong, which selection unit is provided for accessing the zones table and for carrying out the said selection by fetching messages for the designated zone in the zones table.

24 Claims, 10 Drawing Sheets

